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ABSTRACT

The tests reported herein are the product of a major phase in a research and development project with the teaching and learning of concepts basic to assessing arguments in everyday life. Wisconsin Tests of Testimony and Reasoning Assessment (WISTTRA) is composed of seven tests. The first three have to do with student critical skills related to the assessment of testimony. The final four treat student critical skills related to the assessment of arguments developed through reasoning. The tests are presented with instructions for administration. Answer keys and time requirements are also given. (Author)

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PRACTICAL PAPER NO. 6

WISCONSIN TESTS OF TESTIMONY AND REASONING ASSESSMENT (WISTTRA)

REPORT FROM THE CONCEPTS IN VERBAL ARGUMENT PROJECT

ED036863

WISCONSIN RESEARCH AND DEVELOPMENT

CENTER FOR COGNITIVE LEARNING

THE UNIVERSITY OF WISCONSIN
Madison, Wisconsin

U. S. Office of Education
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Practical Paper No. 6

WISCONSIN TESTS OF TESTIMONY AND REASONING ASSESSMENT (WISTTRA)

R. R. Allen, Jerry D. Feezel, and Fred J. Kauffeld

Report from the Concepts in Verbal Argument Project
R. R. Allen, Principal Investigator

Wisconsin Research and Development
Center for Cognitive Learning
The University of Wisconsin
Madison, Wisconsin

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STATEMENT OF FOCUS

The Wisconsin Research and Development Center for Cognitive Learning focuses on contributing to a better understanding of cognitive learning by children and youth and to the improvement of related educational practices. The strategy for research and development is comprehensive. It includes basic research to generate new knowledge about the conditions and processes of learning and about the processes of instruction, and the subsequent development of research-based instructional materials, many of which are designed for use by teachers and others for use by students. These materials are tested and refined in school settings. Throughout these operations behavioral scientists, curriculum experts, academic scholars, and school people interact, insuring that the results of Center activities are based soundly on knowledge of subject matter and cognitive learning and that they are applied to the improvement of educational practice.

This Practical Paper is from the Concepts in Verbal Argument Project in Program 2. General objectives of the Program are to establish rationale and strategy for developing instructional systems, to identify sequences of concepts and cognitive skills, to develop assessment procedures for those concepts and skills, to identify or develop instructional materials associated with the concepts and cognitive skills, and to generate new knowledge about instructional procedures. Contributing to these Program objectives, the staff of the project developed a semiprogramed course in verbal argument and related tests for use at the high school level. The project staff prepared the materials on the basis of an outline of concepts and critical skills developed from an evaluation of everyday discourse.

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INTRODUCTION

The tests reported herein are the product of a major phase in a research and development project dealing with the teaching and learning of concepts basic to assessing arguments in everyday life. An earlier phase of the project developed definitions of such concepts based upon Stephen Toulmin's structural model for the analysis of arguments. These definitions are presented in "A Taxonomy of Concepts and Critical Abilities Related to the Evaluation of Verbal Arguments," Occassional Paper No. 9 of the R & D Center. A companion to this Practical Paper, a Technical Report soon to be published, reports the process of test development which led to this test battery and presents reliability data regarding each of the instruments reported herein.

As initially perceived, one purpose of the test battery was to provide a means of acquiring precise knowledge about student critical skills related to the concepts of interest to the investigators. No extant critical thinking test enabled the acquisition of such data. In practice, this purpose was happily fulfilled. For example, initial pretesting suggested to the investigators that a theoretical postulate regarding the nature of data and warrants in comparative arguments was based on distinctions that students in real life seem unwilling to make. Initial testing also served to guide the efforts of the project staff in determining the point in time at which formal instruction in concepts of argument might most profitably be offered.

A second purpose of this test development, as initially viewed, was to provide a useful diagnostic instrument for teachers in the field. The tests, in their fifth edition, have proven sufficiently reliable to meet this objective also. Through careful analysis of the data provided through the administration of the test battery, the teacher will be able to pinpoint the kind of instruction best suited to the basic critical needs of his students. For example, the teacher may discover student weaknesses in recognizing source bias, or in recognizing the absence of warranting statements, or in making sound inferences based on data and warrants. In addition to providing guidelines for an instructional sequence, these tests may serve as a measure of instructional success when presented in a before–after sequence.

The WISTTRA battery is composed of seven tests. The first three have to do with student critical skills related to the assessment of testimony. The final four treat student critical skills related to the assessment of arguments developed through reasoning. In the pages which follow, each of the tests is presented with instructions for its administration. The answer keys for the tests are presented in Appendix A. A table of time requirements for subtest administration is presented in Appendix B.

Although the purpose of each of the subtests will be apparent to the enlightened reader, others may wish to consult the companion technical report which describes the purpose and content of each of the tests. The teacher who wishes to use these tests may also find it helpful to examine the earlier taxonomic effort of the investigators reported in Occassional Paper No. 9.

EVALUATION OF TESTIMONY

Test TI.

Appraising Testimony in Terms of Internal Criteria

INSTRUCTIONS

When people argue about something, each person generally tries to use some evidence to support the position he is taking in the argument. When an arguer quotes another person, such a quotation is called testimony. For example: Your friend may say, "It's going to rain today." And you say, "Who says so?" and your friend replies, "Judy the weather girl on the morning TV weather report, that's who." If you accept the fact that Judy the weather girl is a reliable source of weather predictions, the discussion will probably end right there. If you reject Judy the weather girl's testimony, the discussion may well go on and on.

The purpose of this exercise is to find out what sorts of testimony you generally accept as reliable. On the following pages are 60 examples of people who are making statements which your friends might ask you to accept as evidence to support statements which they make. Indicate by blocking in on the answer sheet (in pencil) (A) if you accept or (B) if you reject that kind of statement coming from that kind of person or group.

Note: You are not to judge whether the statement agrees or disagrees with your feelings or even if it is a true or false statement. In the example above, don't consider whether you agree or disagree that it will rain today, but decide whether Judy is an acceptable source for that particular prediction of rain. Your decision should be based only on whether you think the person or group cited is an acceptable source for the information which is provided.

1. Senate Reporter:
   Sixty-five percent of the Republican Senators voted for the Smith-Doe Bill.

2. Fisherman:
   I can tell by the pull on the rod that the fish weighs five pounds.

3. State Highway Commissioner:
   The state legislature has just increased highway improvement funds by fifty thousand dollars.

4. Citizen:
   The bond proposal will not be passed by the voters because of the uninteresting TV reports on it.

5. Chairman, Republican Party:
   The Republican National Convention is more orderly than the Democratic National Convention.

6. Shop Teacher:
   Even before entering my course, most of the boys were pretty good mechanics.

7. Drama Director:
   This theater building is a well-reinforced structure made of the finest materials.

8. Football Coach:
   After the lights went out, I heard three boys boxing two others at the far end of the lockers.

9. TV Announcer:
   Many members of my TV audience were bored with my newscast tonight.

10. Senator:
    Even though the new highway bill has my support, most of my fellow committee members have told me that they will vote against it on Friday.

11. Local Druggist:
    Students spend many hours in my store because their studies are not challenging them.

12. Guidance Counselor:
    Fifty-four percent of our seniors plan to enter college in the fall.

13. Movie Viewer:
    The projector was running faster than 24 frames per second.

14. Physical Education Teacher:
    The physical fitness program is the most important feature of the elementary school.

15. Music Authority:
    Classical music is not generally appreciated because many people cannot follow the complex variations of the themes.

16. High School Student:
    Sun Village is an excellent example of modern literature.

17. Taxpayer:
    Because of the unfavorable local newspaper coverage, the City Council changes will not be adopted.

18. State Department of Education:
    Most of the public high schools in our state have less than 3,000 students.

19. Senator:
    Throughout the election campaign, my rallies across the state have been attracting crowds of eager supporters.

20. County Clerk:
    Many young people in this county are getting marriage licenses from me because they wish to escape unhappy home situations.

21. Radio Station Executive:
    Our station commercials are more interesting than those of our competitors.

22. President of the State Medical Association:
    Many doctors who belong to our association admit they don't fully understand the side effects of certain drugs.

23. Heavyweight Champ:
    Boxing matches are not fixed but are honest test of skill.

24. College Minister:
    Most students at our college do not pray before going to bed at night.

25. Reporter:
    The applause at tonight's mass rally indicates that candidate Smith is backed by 15 more people than candidate Jones.

26. Newspaper Reporter:
    Five local men are undercover agents for the FBI.

27. Actress:
    Most of the characters enter from stage left and exit stage right in this play.

28. Automotive Safety Engineer:
    The use of seat belts greatly reduces the possibility of fatal injuries to automobile passengers.

29. Home Economics Teacher:
    The girls were already good cooks when they came to my class.

30. Driver Education Instructor:
    The school bus was traveling 35 m.p.h. as it passed my window.

31. Music Reviewer:
At the symphony concert last night the violinist in the fourth chair, second row hit several sour notes.

32. High School Principal:
College entrance examinations are not very good measures of student abilities.

33. High School Band Member:
The Philadelphia Symphony Orchestra's rendition of this work is superior to the New York Philharmonic's arrangement.

34. President of College:
The college has just received a gift of fifty thousand dollars.

35. Football Fan:
The Bears' coach is in the locker room diagramming a whole new set of plays for the second half.

36. Radio Newscaster:
Senator Brown has twenty more supporters than his opponent as shown by the cheers at tonight's huge political rally.

37. Telephone Supervising Operator:
Our women phone users make more social calls than business calls to local numbers.

38. Supermarket Manager:
Checkout in our store is faster than in any other supermarket in town.

39. High School Student:
There are two drive-in theaters in our town.

40. U. S. Magazine Columnist:
Red China has a buildup of troops in the southern provinces.

41. Motion Picture Producer:
Our movies are of better quality than those of the other major studios.

42. Secretary of Defense:
For adequate defense, one-third of the SAC bombers must be prepared for take-off within 15 minutes after alert.

43. Economics Professor:
It seems that the U. S. will be in a period of inflation for the next year.

44. State Census Bureau:
Most people in the state are under 30 years of age.

45. Team Doctor:
As I leaned over the quarterback lying on the field, I could tell that he had a small crack in the bone of his leg.

46. State Department of Education:
Our state is the leader in U. S. public school instruction.

47. P.T.A. President:
Three members of the school board are now voting in favor of the resolution being considered in secret by that group.

48. TV Cameraman:
New developments in camera equipment have made it possible to use less light, thus reducing the heat in the studio.

49. Home Economics Teacher:
Of the students now in the principal's office, two are being suspended and the others are receiving work penalties.

50. Governor:
During the two years of my administration, we have made outstanding progress in bringing new industry to our state.

51. Health Inspector:
Looking at the stagnant water in this alley, I can tell it contains bacteria cells of the type C and type F varieties.

52. State Senator:
There are several active Communist Party members teaching at the State University.

53. Secretary of Commerce:
Last year one out of three new business ventures failed after less than six months.

54. U. S. Supreme Court Justice:
Atmospheric nuclear testing is harmful to plant and animal life.

55. Mayor:
Many aldermen have indicated to me that they will vote for the West Side part site contrary to my preference for the South Side park site.

56. Father:
My son Johnny will not be a good student since he doesn't enjoy readings.

57. Witness at Trial:
The woman who brushed my hand in the darkness was wearing a mink coat.

58. High School History Teacher:
The study of history is of greater value to high school students than the study of American government.

59. First Baseman:
Although I'm glad the umpire called it a strike, I am sure that last pitch to their shortstop was a ball.

60. Art Expert:
Modern art doesn't have universal appeal because it departs too far from reality for most people.

EVALUATION OF TESTIMONY

Test TII.
Appraising Testimony in Terms of External Criteria; Consistency with Other Testimony

INSTRUCTIONS

When people argue about something, each person often tries to find some evidence to support the position he is taking in the argument. When an arguer quotes another person, such a quotation is called testimony. In evaluating testimony, we generally compare it with other testimony we have heard. Such a comparison helps determine whether we are likely to accept the testimony advanced by the arguer.

The purpose of this exercise is to find out how well you compare instances of testimony. On the following pages you will find 20 pairs of quotations. Assume the first quotation in the pair is one advanced by an arguer and the second quotation is one that you have discovered through research or conversation. In each case block in with pencil on the answer (A) if the second testimony (that which you have found) makes you more likely to accept the quotation which the arguer has used (the first testimony) or block in with pencil (B) if the second testimony makes you less likely to accept the first quotation. Does accepting or knowing II make you more likely to accept I or less likely to accept I?

Note: You are not to judge whether the statements agree or disagree with your feelings or even if they are true or false statements. Your decision should be based only upon your comparison of the two pieces of testimony.

1. I. Tom, a Student:
The math final was easy and we all did well on it.

II. Tom, a Student:
The highest score in class on the math final was lower than most of the scores on previous math tests.

2. I. Times Sports Editor:
Many experts feel pro center Buzz Hoopla will be better than ever next year.

II. Times Sports Editor:
Basketball star Buzz Hoopla has been signed by the Dunkers at a large boost in salary.

3. I. American League President:
Public interest in baseball has declined in the last year.

II. National League President:
All major league clubs have had sizable increases in attendance over the past year.

4. I. Sam, Pro Golf Official:
The greens are in good condition for today's match.

II. Sam, Pro Golf Official:
Even the best of the golfers are complaining about the rough spots on the greens in today's match.

5. I. Book Publisher:
An increasing number of adults and teenagers are purchasing The Greater Gift.

II. Book Critic:
The Greater Gift is losing its entertainment appeal to teenagers.

6. I. Editor of Boxoffice Magazine:
The movie industry should draw up guidelines for better quality movies.

II. Editor of Boxoffice Magazine:
The percentage of Class A movies produced last year dropped by 10 percent.

7. I. Mayor Jones:
We will need to expand the police force within the next five years.

II. Mayor Jones:
The amount of crime in our city is on the rise.

8. I. Chairman of School Board:
We need to increase the allotment in the budget for school bus transportation this fall.

II. Superintendent:
Our district was expanded this fall from a four-mile radius to a seven-mile radius.

9. I. National Director of Physical Fitness:
Although school physical education programs have been expanded in the last five years, the average student health level has not changed.

II. National Director of Physical Fitness:
As yet, no school has reported a significant increase in their student health level.

10. I. Senior English Teacher Blair:
Only two out of seven students are taking the special course in their senior year.

II. Senior English Teacher Adams:
Over a third of the seniors are enrolled in the special English course.

11. I. French Teacher:
The English staff should be increased by ten percent this September.

II. Spanish Teacher:
About half as many students have enrolled in English for this year as compared to last year.

12. I. Mr. Jones, TV Censor:
Most television shows avoid excessive drinking so that they will not violate federal regulations.

II. Mr. Jones, TV Censor:
Federal law permits scenes showing people getting drunk.

13. I. Literary Review Magazine:
Hollywood is becoming aware of the wealth of good story materials in books, plays and articles.

II. Variety Magazine:
Nine of the top ten fiction best-sellers have been purchased for movie adaptation.

14. I. Attorney for Union:
The steelworker's strike in City X is against state law.

II. Corporation Lawyer:
The state strike regulations do not apply to the steel industry in City X.

15. I. Carl Copy, Newspaper Editor:
Many important domestic problems are unfortunately being neglected in our eagerness to reach the moon.

II. Carl Copy, Newspaper Editor:
The federal budget should allow more money for the "race for space" program.

16. I. Mrs. Brown:
The school bus was seldom late.

II. Mrs. Stone:
There have been only a few occasions when the school bus was not on time.

17. I. Dean Briggs, State University:
This year's freshman class is the best prepared freshman class of the last five years.

II. Dean Briggs, State University:
Fewer students have come to my office with course difficulties than in previous years.

18. I. Election Official:
The polls should remain open from 6:00 a.m. to 6:00 p.m.

II. State Attorney General:
State law requires voting places to remain open for at least ten hours.

19. I. Judge Martin:
Seventy percent of the speeding tickets which are given are paid without question.

II. Judge Martin:
The charges are dismissed on half the tickets given for speeding.

20. I. Mayor of Hillview:
We were honored by the presence of three state candidates this time compared to five visiting candidates last election.

II. Hillview Police Chief:
Fewer state candidates have visited our town than in the last election.

EVALUATION OF TESTIMONY

Test TIII.
Appraising Testimony in Terms of External Criteria: Recency and Proximity

INSTRUCTIONS

When a speaker does research on a topic for a speech, he usually finds a number of different pieces of testimony which he could use in his speech. Some testimony is more acceptable than others for giving information on a subject. Since he cannot cite all the testimony available because of time limitations, he must compare the available quotations and select that testimony which seems best.

The purpose of this exercise is to find out what sorts of testimony you generally prefer. Like the speaker, you will make choices in completing the test which follows. Compare the following 40 pairs of testimony and block in with pencil either (A) or (B) on the answer sheet to indicate which testimony you think is the better of the two on the topic to which both A and B refer.

Note: You are not to judge whether the statements agree or disagree with your feelings or even if they are true or false statements. Your decision should be based only upon your comparison of the two pieces of testimony.

1. A. Teacher A:
As we begin the 1966-67 school year we can expect more than 75 books to disappear from the library.

B. Teacher B:
Less than fifty books were missing from the library when the 1966-67 school year ended.

2. A. TV Reviewer:
The new Drama Hour has not produced good dramas in its first three weeks of the season.

B. Entertainment Editor:
The Drama Hour, after a full season, has failed to provide quality drama for evening viewing.

3. A. Health Inspector:
The pool's chlorine content was too high today when I tested it.

B. Pool Director:
I was told that today's tests indicated the concentration of chlorine in the water to be above the suggested limit.

4. A. Congressman A:
Our present budget will be adequate to support the new slum clean-up program.

B. Congressman B:
The slum clearance has almost been fully accomplished, and the original tax support has been more than enough.

5. A. French Ambassador to U. N.:
Few of the questions before the General Assembly are vetoed by the U. S. S. R.

B. French Foreign Affairs Minister:
Our ambassador to the U. N. has noted that Russia uses the veto power often.

6. A. Senator Blunt:
We can begin the state highway program confident that present funds will handle it.

B. Senator Harsh:
With the highway program nearing completion, we can see that there is no need for additional taxes to cover it.

7. A. Broadway Critic:
The musical which opened last night will not run for more than a few weeks.

B. Theater News Editor:
The new musical closed yesterday after only a two-week run.

8. A. News Bulletin:
Since yesterday's election, all but 5 percent of the ballots have been counted and Krane seems to be headed for victory.

B. News Commentator:
With citizens just beginning to go to the polls today, the indications are that Krane will not carry enough of the districts to win.

9. A. Drama Professor:
Paul Purdy's first play, "Gogolot," illustrates his basic weakness in plot structure.

B. Professor of Theatre:
Paul Purdy writes well structured plots as illustrated by his latest work, "Anagrams."

10. A. Journal of Economics:
Statistics indicate that the cost of living index has fallen over the past three months.

B. U. S. Vital Statistics:
The cost of living has risen 3 percent in the last three months.

11. A. Jane's Father:
When we went on our first Mexican vacation last month, Jane missed five days of school.

B. Jane's Mother:
Jane will not miss more than five days of school when we take our first vacation to Mexico.

12. A. CBS Polling Report:
Our evidence shows that the American public spent fewer hours last year than the year before watching TV.

B. Broadcasting Annual:
According to network surveys, TV has increased in viewer popularity over the past two years.

13. A. American Farm Journal:
The number of small farms in the U. S. has decreased in the last ten years as shown by the 1960 census.

B. U. S. Census Bulletin:
There has been a decline in the number of small farms between 1950 and 1960.

14. A. Nielson TV Ratings:
Ninety-one percent of the viewers watched "The Grindstones" last week.

B. TV Reviewer:
"The Grindstones" show was seen by nine out of ten viewers last week according to the ratings.

15. A. TV Guide:
"Rock-out" has been cancelled in its second season, demonstrating the fading popularity of teen shows.

B. TV Preview:
In its first season, the success of "Rock-out" shows the rising popularity of teen shows.

16. A. Driver Education Council:
Official state statistics show that teenage drivers are responsible for one-third of the state's auto accidents.

B. State Motor Vehicle Department:
Teenagers are to blame for over half of all auto accidents in the state.

17. A. Dr. Pilz:
A smallpox epidemic has broken out in the schools which will reach over half the students.

B. Dr. Shotz:
Most of our students were not affected by the smallpox epidemic which ended last month.

18. A. NBC Executive:
The commercials we have accepted this year are of lower quality than last year's commercials.

B. Advertising Executive:
The NBC network reports that they have raised their standards of acceptance for TV commercials in the last year.

19. A. Doctor of Optometry:
Research reports indicate that greenboards cause less strain on children's eyes than do blackboards.

B. Vision Study Report:
Our research shows that children experience more eyestrain from blackboards than from greenboards.

20. A. American Theological Survey:
Over the past five years the percentage of American students with strict moral beliefs has increased.

B. The Journal of Theology:
A special survey reveals that the moral attitudes of American students are more strict today than five years ago.

21. A. Dr. Gesund:
Most of the community population were not affected by the spring allergy season that just ended.

B. Dr. Heit:
The spring allergy season which begins next week will affect over half the community.

22. A. Boxing Fan A:
The heavyweight boxing title match next week won't go more than six rounds.

B. Boxing Fan B:
What did I tell you? The heavyweight boxing title match yesterday lasted only five rounds.

23. A. Traveler A:
I lived in Hannibal, Missouri 20 years ago, and I am sure it is a delightful, slow-paced town.

B. Traveler B:
When I left Hannibal, Missouri yesterday after a two-week visit, I felt that it was a very fast-paced town.

24. A. "Drag," Racing Driver:
See what I mean? Fourteen cards didn't finish in the Niagara race last week.

B. "Speedy," Racing Driver:
You can bet your bottom dollar that at least ten cars won't finish the Niagara race next month.

25. A. Movie Business News:
A major studio report reveals that movie attendance increased during these past two years.

B. MGM Studio Report:
Our box office data indicates that Americans attended fewer movies this year than last year.

26. A. Physical Fitness Study:
Our findings reveal that children are in better physical condition today than they were five years ago.

B. Physical Education Journal:
Research studies show that children five years ago were in worse condition physically than they are today.

27. A. Combo Pianist:
We do not plan to perform at the Chanticler for more than a week.

B. Combo Drummer:
Now that we have completed a week at the Chanticler, we will not perform there this evening.

28. A. Tennis Player A:
Windsor tennis courts that opened for the season yesterday will be in very poor condition this year.

B. Tennis Player B:
Windsor tennis courts that closed for the season yesterday were in excellent condition this year.

29. A. President of Mayville Realtors:
The average home in Mayville has increased ten percent in value during the past three years.

B. Editor of Mayville Newspaper:
A reliable spokesman for local realtors has reported that the value of local estate has increased by 10 percent during the past three years.

30. A. English Teacher:
All of the students at Milford High School were given a series of standardized tests today.

B. Social Studies Teacher:
Our students at Milford High School will all be given a series of standardized tests next week.

31. A. Senator from Iowa:
Both of the senators from Illinois argue against military bills which are proposed.

B. Governor of Iowa:
One of our U. S. Senators has commented that the Illinois Senators are split on the military bills.

32. A. President of College:
Our Dean of Student Affairs has reported that none of our students were involved in last night's riots on State Street.

B. Dean of Student Affairs:
Although last night's riots occurred near campus, I am happy to report that none of our students were involved.

33. A. Court Recorder:
The jury for the Marston trial met for twelve hours and thirty minutes before returning with their verdict.

B. Newspaper Reporter:
According to an official of the court, the Marston jury took twelve and one-half hours to reach their verdict.

34. A. Professor of Art History:
Quentin's first painting, "Nuages," shows his basic inability to use colors to achieve an effect.

B. Director of Art Museum:
Quentin's paintings display masterful use of color to achieve a specific effect, as shown in his recent work, "Fetes."

35. A. President of Green Sox:
I have been told that Gilson's arm will be in shape for pitching in tomorrow's big game.

B. Green Sox Manager:
It looks as if the swollen arm has not improved enough for Gilson to pitch tomorrow.

36. A. State Senator:
According to the 1970 census, our state ranks thirteenth in the nation in population.

B. State Assemblyman:
According to the 1960 census, our state ranks thirteenth in the nation in population.

37. A. Counsellor A:
Jack must be a good student because he graduated in the top third of his college graduating class.

B. Counsellor B:
Jack must be a poor student because he graduated in the bottom third of his high school graduating class.

38. A. State Census Bureau:
Half of the people in the state are in the 0 to 30 age group.

B. State Department of Education:
Census data shows that less than one-third of state residents are under age 30.

39. A. News Service Executive:
The network intends to drop the "Green Fakers" program following the October 12 telecast.

B. Network Executive:
The "Green Fakers" will not be continued after the October 12 telecast.

40. A. Student Council President:

It seems that students have little trouble getting from class to class in the time provided.

B. Chairman of Math Department:

The student representatives feel that there is not enough time for passing between classes.

EVALUATION OF REASONING

Test RI.
Recognizing and Selecting Warrants in Arguments

INSTRUCTIONS

In any argument there are at least three parts: (1) a claim, that is, a statement which the argument offers as a conclusion; (2) data, that is, a statement presenting information in support of the conclusion; and (3) a warrant, that is, a statement which tells how you get from the data (information) to the claim (conclusion). When one tries to relate information to a conclusion based on that information, one is said to be reasoning.

Arguments that people present in real life are often not complete. Speakers frequently neglect to present their warrants assuming that the listener will fill in the proper one. For example, a speaker tells you that "Jimmy Dean's new record must have sold a million copies because the record company gave Jimmy a gold record." Is this argument complete? Let us examine what is there. It is clear that "Jimmy Dean's new record must have sold a million copies...." is the claim or conclusion or the argument. It is also clear that "the record company gave him a gold record" is the data of the argument. What is missing from this argument is the warrant—the statement which links Jimmy Dean's getting a gold record to the assertion that he must have sold a million records. What might the warrant sound like? In order to relate a gold record to "a million records sold," one would have to supply a statement such as "gold records are given to recording artists only when one of their records sells a million copies."

In the following pages you will be presented 28 arguments; the data and claim are given in every instance as well as some third statement. You are to decide whether the other statement is the warrant for the argument or merely additional information. If the warrant of the argument is present, you should block in with pencil on the answer sheet (E), "None needed." If the warrant is missing (and only if the warrant is missing), you should choose from (A), (B), (C), or (D) the statement which best connects the data and the claim.

1. With two men out, a man on second base, and his team behind by one run, Bill stepped up to the plate and hit a home run over the center field fence. Thus he must have slammed that ball squarely and with a great deal of force.

   A. All balls that clear the fence in bounds are home runs.
   B. Bill hit a typical home run.
   C. Home runs are usually hit harder than line drives.
   D. Hitting the ball over the center field fence is a natural result of hitting it squarely and with a great deal of force.
   E. None needed.

2. Soapy Suds has been advertised for several weeks on nation-wide television networks. A series of television advertisements plugging a product usually indicates that the product was made by a big company which can afford expensive television time. Thus Soapy Suds is probably made by a large company.

   A. Some companies have large advertising departments.
   B. Soapy Suds advertises more than some other soap companies.
   C. Television commercials are a sign that the product advertised is made by a large company.
   D. Television commercials result from large companies.
   E. None needed.

3. The chairman of the school board did not refer the teachers' salary request to a committee. The school board either tabled the request or referred it to a special committee. So the teachers' request must have been tabled.

   A. The school board's deliberation was very similar to the consideration they gave the last request offered by the teachers.
   B. Either the salary increase requested by the teachers was tabled by the school board or it was sent to a special committee.
   C. The teachers requested lesss money this year than they asked for last year.
   D. The teachers' request for a salary increase is a typical teacher request.
   E. None needed.

4. Johnny has weak eyes and weak eyesight forces students who sit in the last three rows to squint when they look at the blackboard. Then Johnny will have to squint to see the blackboard if he is moved to the back row.

   A. When students are seated in the rear of the room, poor vision causes some of them to squint.
   B. Students who sit in the back of the room squint more than students who sit in the front of the room.
   C. Weak eyesight is typical of many students.
   D. Students with weak eyesight are often seated in the front of the room.
   E. None needed.

5. The Bijou Theater is north of the Star Theater, and the Star Theater is nearer our house than the Bijou Theater. The Bijou Theater is, therefore, north of Sam's Eats.

   A. Restuarants are often located near theaters.
   B. The Bijou Theater is a typical theater.
   C. Sam's Eats is south of the Star Theater.
   D. The fact that the Bijou Theater is north of Sam's Eats results from the location of the Star Theater.
   E. None needed.

6. Bill is now enrolled at Warren College in Virginia and he enjoys being away from home very much. Therefore, we know that he is a student.

   A. Enrolling in a college causes a person to leave home.
   B. People who are enrolled in colleges are students.
   C. Being away from home indicates that a young man is a student.
   D. Bill is a typical student at Warren College.
   E. None needed.

7. A clear majority of the citizens who elected Senator Sampson oppose his recent support of the MacBurney Bill. The MacBurney Bill is an important urban renewal bill. Thus, Senator Sampson will revise his opinion of the MacBurney Bill.

   A. Clear opposition from the citizens who elected him causes Senator Sampson to change his mind.
   B. Citizen opposition to the MacBurney Bill indicates citizen opposition to urban renewal.
   C. Senator Sampson will either change his opinion or retain his present evaluation of the proposal.
   D. Senator Sampson's relationship with the voters he represents parallels Senator Goodenough's relationship with his home voters.
   E. None needed.

8. Shorewood High and Eastbrook High have about the same number of teachers and students and offer almost the same courses and have much the same kind of buildings. Enough important points of similarity have been examined to generalize; thus we can conclude that Shorewood High and Eastbrook High are essentially similar.

   A. Students in this community will attend either Shorewood High or Eastbrook High.
   B. Shorewood High and Eastbrook High are larger than most high schools.
   C. The fact that Shorewood High has good teachers forces Eastbrook High to have good teachers also.
   D. Enough important points of resemblance have been examined to establish the general similarity of these schools.
   E. None needed.

9. Mr. Henswar, who moved into our neighborhood last week, is a judge. He is one of the new judges I have never seen. It can be concluded that Mr. Henswar is a dignified man.

   A. Mr. Henswar is a typical newly appointed judge.
   B. Repeated presence in court is a sign of dignity in a man.
   C. Judges are dignified men.
   D. Mr. Henswar is more dignified than our previous judge.
   E. None needed.

10. Jim is a twelfth grader at Plainview High School. He is planning to go to college in the fall. So he will probably graduate from high school in the spring.

    A. Jim will either fail or graduate in the spring.
    B. Twelfth graders usually graduate from high school in the spring.
    C. Graduation in the spring is the usual result of studying hard in the twelfth grade.
    D. Jim is very much like other Plainview High students.
    E. None needed.

11. Jimmy Hunt is a television star. Most television personalities go out of their way to get publicity. Therefore, Jimmy Hunt probably seeks public attention.

    A. Appearances on television usually indicate that a person seeks publicity.
    B. Jimmy Hunt seeks more publicity than other TV stars.
    C. Being a television star causes Jimmy Hunt to seek publicity.
    D. Television stars seek public attention.
    E. None needed.

12. The North Shore School District started a special guidance program for its high school students, and school attendance increased fifteen percent. If a similar program is started in the Shorewood School District, then attendance at the Shorewood High Schools will probably go up about fifteen percent.

    A. Attendance at the Shorewood High Schools will either go up, remain the same, or go down.
    B. The North Shore School District and the Shorewood School District are so similar that changes in the Shorewood District will have the same effect as changes in the North Shore District.
    C. The North Shore and Shorewood Schools are typical with respect to attendance policies.
    D. Increased school attendance sometimes results from special programs.
    E. None needed.

13. Eye Eaze has been advertised for over a month on a nation-wide television network. Many television advertisements pushing a product frequently indicate that the product is put out by a very large company which can pay for the high cost of television commercials. Therefore, Eye Eaze is probably produced by a large company.

A. Large companies advertise on national, regional, or local television.
B. Eye Eaze advertises much like other eyewash companies.
C. Television commercials are a sign that the product advertised is made by a large company.
D. Television commercials are the result of large companies.
E. None needed.

14. I saw five students go by my house carrying caps and gowns. The caps have either gold or black tassels on them. Therefore, it must be graduation week.

A. The students are graduating from either high school or college.
B. Graduation is the result of successfully completing a program of study.
C. Students carrying caps and gowns is a sign of graduation week.
D. Honors students wear gold tassels at graduation.
E. None needed.

15. John Smith doesn't own the home he has lived in for only a few years. Occupants either own their homes or rent them. It can be concluded that John Smith must be a renter.

A. Living in a home for only a few years is a sign of renting that home.
B. Occupants of homes are of two types —renters and owners.
C. Rental units are usually small.
D. Limited finances cause a person to rent rather than to buy a home.
E. None needed.

16. Betty is Mary's mother. Sara is very young but is a very good cook. Sara is, therefore, Betty's granddaughter.

A. All female humans are either mothers, daughters, or sisters.
B. Sara is Mary's daughter.
C. Being young is a sign of not being a mother.
D. Betty, Mary and Sara are typical mothers and daughters.
E. None needed.

17. Alvin Sturdley, an elected official, is not with the state or federal government. All government offices have grown incredibly in size. Then he must be a local official.

A. Officials of state governments have more responsibilities than those in local governments.
B. Being an official is a sign of having been elected.
C. Alvin Sturdley is a typical elected official.
D. Elected officials are either members of local, federal, or state governments.
E. None needed.

18. In Iowa's recent state elections, 70 percent of the offices were won by Republicans. The Attorney General and Treasurer were included in these Republican victories. So, I would imagine that the Republicans won more than half of the offices in Minnesota's election.

A. The Republican victories in Iowa help to bring about Minnesota Republican victories.
B. Iowa and Minnesota are basically similar in matters of voter behavior.
C. Iowa and Minnesota are either similar or very different in state political matters.
D. Minnesota has more voters than Iowa.
E. None needed.

19. The cows have just come from the pasture to the barn. Cows are milked twice a day, once in the morning and once in the evening. Then it must be milking time.

A. Cows returning to the barn is a sign that it is milking time.
B. All kinds of dairy cows are milked twice a day.
C. Milking times come at the same time each day.
D. These cows are typical milking cows.
E. None needed.

20. The thirty-five high schools in the state visited by the governor's special committee on education were built within the last ten years. The committee did not visit the western portion of the state. It can be concluded that most of the high schools in the state are probably less than ten years old.

A. The high schools visited by the committee are typical of most high schools in the state.
B. Being visited by the governor's committee is a sign that the high school is less than ten years old.
C. The high schools in the western portion of the state were visited by the governor's committee last year.
D. The study undertaken by the governor's committee is essentially the same as the study done four years ago.
E. None needed.

21. During the last fifteen years, in every case when the governor ordered a stay of execution, the execution was stopped. This examination of cases is an adequate survey of the results of a governor issuing a stay of execution, so it can be said that a stay of execution ordered by the governor causes a halt in the execution.

A. Governors have the power to halt the executions.
B. A stay of execution order indicates that the governor is considering the case.
C. These orders of the governor were more frequent than the other orders given by the governor.
D. The examination of stays of execution ordered by the governor has been sufficient to generalize.
E. None needed.

22. The "Leslie Pile Show" enjoyed a very successful season on television last year. The "Leslie Pile Show" and the "Frankie Pyron Show" are similar in all important respects. Thus it is reasonable to expect that the "Frankie Pyron Show" will also be very successful.

A. Television variety shows are often very entertaining.
B. The "Frankie Pyron Show" is a typical variety show.
C. The "Frankie Pyron Show's" popularity will be a result of its being shown in color.
D. The "Leslie Pile Show" and the "Frankie Pyron Show" are essentially similar.
E. None needed.

23. William Carruthers wrote Hangman's Tree, a famous literary work. I understand that Hangman's Tree is not a play or a poem. Therefore, it must be a novel.

A. Enough copies of Hangman's Tree have been sold to call it a famous literary work.
B. William Carruther's Hangman's Tree is essentially similar to other literary works on social criticism.
C. William Carruthers made Hangman's Tree a famous novel.
D. Hangman's Tree is either a play, a poem, or a novel.
E. None needed.

24. Jim took a poll of families in his neighborhood and found that some want the zoo expanded, some want a children's zoo to be built, and still others want a second zoo on the east side. The City Council will discuss this issue on Thursday. So it looks like the people of Melville want either the present zoo expanded, a new one for children, or a second one on the east side.

A. Families in Melville are concerned about the zoo problem.
B. The people in Jim's neighborhood are representative of the citizens of Melville in general.
C. Concern over the zoo problem is a result of living in Jim's part of town.
D. People in Melville either like the present zoo or are unhappy with it.
E. None needed.

25. Last year at this time, with students under the tensions of studying for finals and the temperatures in the 90's, water fights broke out on campus. Proper handling by the authorities rapidly restored order. So there just might be a repeat of such disturbances this week before finals.

A. Last year's water fights are typical of student disturbances in general.
B. Riots on campus indicate that students are worried about final exams.
C. The circumstances of the water fights last year were quite similar to the situation on campus this week.
D. Students who participate in campus disturbances are often seeking an outlet for pent-up worry and tension.
E. None needed.

26. Urgandis are taller than Zagudis. There are a lot of other tribes in Africa; thus, I'm willing to bet that the Kumbawas are shorter than the Urgandis.

A. Being an Urgandi is a sign of being tall.
B. Urgandis and Kumbawas have similar diets and medical care.
C. All native Africans have tribal origins.
D. Zagudis are taller than Kumbawas.
E. None needed.

27. Halfbacks are faster than flankerbacks and flankerbacks are faster than fullbacks. Halfbacks are, therefore, faster than fullbacks.

A. All backs are either quarterbacks, halfbacks, fullbacks, or flankerbacks.
B. All backs are fast.
C. These backs are typical of all backs.
D. Fullbacks are not as fast as flankerbacks.
E. None needed.

28. Cold weather is now upon us. The Farmers Almanac is predicting the coldest weather in the past decade. Then I guess the birds will be flying south pretty soon.

A. Some birds fly farther south for the winter than do others.
B. A flock of birds flying south is often made up of one species.
C. Birds winging south are a sign of autumn.
D. Cold weather in the autumn causes birds to fly south.
E. None needed.

EVALUATION OF REASONING

Test RII.
Recognizing Statements Which Answer Reservations in Arguments

INSTRUCTIONS

In any argument there are at least three essential parts: (1) a claim, that is, a statement which the argument offers as a conclusion; (2) data, that is a statement presenting information in support of the conclusion; and (3) a warrant, that is, a statement which tells how you get from the data (information) to the claim (conclusion). For example, if I want you to accept the claim that "John Doe is a communist," it will be necessary for me to give you some data such as "John Doe goes to communist meetings." But to complete the argument, it will also be necessary for me to give you a warrant showing how the data is connected to the claim, such as "attending communist meetings indicates that a man is a communist."

Although two arguments may contain identical claims, data, and warrants, other information within arguments still makes people prefer one argument to another. For example, the following two arguments contain the same data, warrant, and claim. (A) "John Doe goes to communist meetings and since attending communist meetings indicates that a man is a communist, John Doe is a communist. I know for a fact that he has attended meetings for six months now." (B) "John Doe goes to communist meetings and since attending communist meetings indicates that a man is a communist, John Doe is a communist. I know for a fact that he is not a college graduate." The extra statement in each argument gives you some reason to prefer one to the other.

In the following pages you will be asked to read 28 pairs of arguments and choose the one which you think most convincing or the better argument. If argument "A" seems better to you, block in on the answer sheet in pencil (A). If argument "B" seems better to you, block in (B). You will notice that a particular statement (such as data or warrant) may not be a separate sentence but that two or more statements may be combined in one sentence, as is the case for the examples in the second paragraph above.

1. A. George is probably a good young farmer because he is a member of our school's Future Farmers of America Club. Last year he won four blue ribbons at the county fair with his dairy cattle. Our county agricultural agent says that membership in the FFA is a pretty good sign that a boy is a good young farmer.

   B. George is probably a good young farmer because he is a member of our school's Future Farmers of American Club. The Club has twenty-two members and meets every Saturday morning in the Agricultural Lab. Our county agricultural agent says that membership in the FFA is a pretty good sign that a boy is a good young farmer.

2. A. Charles Banks is a better teacher than Gladys Hanks. In addition, Gladys Hanks is a better teacher than Cynthia Stein. Since the same standards were used in evaluating all three, Charles Banks is apparently a better teacher than Cynthia Stein.

   B. Charles Banks is a better teacher than Gladys Hanks and Gladys Hanks is a better teacher than Cynthia Stein. Since all three received master's degrees from the State University, Charles Banks is apparently a better teacher than Cynthia Stein.

3. A. That new stretch of Highway 12 has big cracks and bumps in it already. Both Highway 12 and Highway 20 pass through a low swampy area. This probably means that the new stretch of Highway 20 will get cracks and bumps too. Those two highways are a lot alike and were both built by the same construction company.

   B. That new stretch of Highway 12 has big cracks and bumps in it already. There have been three bad accidents on that stretch of Highway 12 in the past two weeks. This probably means that the new stretch on Highway 20 will get cracks and bumps too. Those two highways are a lot alike and were both built by the same construction company.

4. A. There are lights on in almost every room of the student dormitory. Most university students now live in university owned high-rise dormitories. It must be examination time at the university. When you see lights on in almost every room of the dormitory, it's usually a good sign that it is examination time.

   B. There are lights on in almost every room of the student dormitory. There weren't many students on the streets earlier in the evening either. It must be examination time at the University. When you see lights on in almost every room of the dormitory, it's usually a good sign that it is examination time.

5. A. In the school health checkup, Pete weighed 135 pounds and Jim weighed 128 pounds. Both fellows are juniors and are in the same health class. Pete clearly is heavier than Jim because the examination of their weights was accurate.

   B. In the school health checkup, Pete weighed 135 pounds and Jim weighed 128 pounds. Both fellows were weighed on the same scale with their gym suits on. Pete clearly is heavier than Jim because the examination of their weights was accurate.

6. A. Motor cyclists use crash helmets. Brian Bentley frequently wears a crash helmet when he drives. He is probably a motor cyclist inasmuch as he is not an automobile race driver.

   B. Motor cyclists use crash helmets. Brian Bentley frequently wears a crash helmet when he drives. He is probably a motor cyclist inasmuch as he loves to putter around with motors.

7. A. Detroit will probably have serious riots in slum areas this summer inasmuch as Chicago is having violent slum riots. To emphasize the problem, the mayor of Chicago called this summer's riots the most serious in the history of the city. Chicago and Detroit are a lot alike from the standpoint of factors which lead to rioting.

   B. Detroit will probably have serious riots in slum areas this summer inasmuch as Chicago is having violent slum riots. Both cities are having a hot summer, have large ghetto areas, and have minority group unemployment problems. Chicago and Detroit are a lot alike from the standpoint of factors which lead to rioting.

8. A. I drove around town last night and I noticed that there were only three kinds of houses: ranch style, two story, and split level. Some of these were featured in American Homebuilders magazine. Since the houses I saw were in typical residential neighborhoods, the houses in this town must be either ranch style, two story, or split level.

   B. I drove around town last night and I noticed that there were only three kinds of houses: ranch style, two story, and split level. I traveled through both old and new neighborhoods. Sine the houses I saw were in typical residential neighborhoods, the houses in this town must be either rancy style, two story, or split level.

9. A. John took a civics course last semester. He was present every day, completed all assignments, and passed the course. It is quite likely that he understands the structure of local, state, and federal government because taking a civics course brings about an understanding of the three levels of government.

   B. John took a civics course last semester. He is a senior now and hopes to be accepted at the State University. It is quite likely that he understands the structure of local, state, and federal governments because taking a civics course brings about an understanding of the three levels of government.

10. A. The Presidential primary election works very well in Wisconsin. It should work very well in Minnesota too since Wisconsin and Minnesota are essentially similar in matters related to politics. The Presidential primary, as you know, enables the citizens of their states to express their preferences for Presidential candidates for the November election.

    B. The Presidential primary election works very well in Wisconsin. It should work very well in Minnesota too since Wisconsin and Minnesota are esentially similar in matters related to politics. Both states have well defined political parties, both states represent a blend of city and rural politics, and both states have strong local political activity.

11. A. The Capitol Building of Wisconsin is shorter than the U. S. Capitol; the Wisconsin Capitol Building is taller than the Iowa Capitol Building. Because all three were measured from ground level not sea level, the U. S. Capitol is taller than the Iowa Capitol Building.

    B. The Capitol Building of Wisconsin is shorter than the U. S. Capitol; the Wisconsin Capitol Building is taller than the Iowa Capitol Building. Because all three contain legislative and administrative offices, the U. S. Capitol is taller than the Iowa Capitol Building.

12. A. Sharol Sunshine is a teacher at the new West High School. Since almost all teachers at the new West High School have previous teaching experience at some other school, Mrs. Sunshine probably has previous teaching experience. She has three speech classes and two English classes as well as the directorship of the fall play and an assignment to assist in other speech activities.

    B. Sharol Sunshine is a teacher at the new West High School. Since almost all teachers at the new West High School have previous teaching experience at some other school, Mrs. Sunshine probably has previous teaching experience. Most of the teachers who don't have previous teaching experience are fresh out of college, and Sharol Sunshine finished college five years ago.

13. A. The last ten class graduation speakers at our high school have had good grades. These past instances are typical of graduation speakers. Since the basis for selecting graduation speakers has not been changed, being selected class graduation speaker is a sign of having good grades.

    B. The last ten class graduation speakers at our high school have had good grades. These past instances are typical of graduation speakers. Since all of the speakers have delivered fine speeches, being selected class graduation speaker is a sign of having good grades.

14. A. The people who live in the northwest corner of the state are many miles from a major city. Since great distances from a major city cause poor television reception, television reception in the northwest corner of the state is probably very poor. There are no booster towers or community antennas in that whole region.

    B. The people who live in the northwest corner of the state are many miles from a major city. The whole area consists mainly of farms, small villages, and state parks and timber lands. Since great distances from a major city cause poor television reception, television reception in the northwest corner of the state is probably very poor.

15. A. Announcers on regular TV news programs present either local news, national and international news, sports, or the weather. Judy has been on television for more than five years now and is well liked. Since her part of the regular news program is not national and international news, or sports, Judy must be the weather girl.

    B. Announcers on regular TV news programs present either local news, national and international news, sprots, or the weather. Judy's station has the same person do local, national and international news. Since her part of the regular news program is not national and international news, or sports, Judy must be the weather girl.

16. A. The teachers in Midtown's East High School settled for a six percent pay increase. The teachers in Midtown's West High School will probably also settle for a six percent pay increase since these two groups of teachers are similar in matters related to salary. Both schools have a tradition of scholastic excellence with a large percentage of students from both schools going on to college.

    B. The teachers in Midtown's East High School settled for a six percent pay increase. The teachers in Midtown's West High School will probably also settle for a six percent pay increase since these two groups of teachers are similar in matters related to salary. The teachers of both schools are roughly alike on such factors as age, sex, marital status, teaching experience, and academic training.

17. A. All the TV shows which have changed from black and white to color have improved their popularity ratings. Similar improvement has not occurred for shows which stayed in black and white. Since we have adequately examined changes to color TV, we may conclude that changing to color improves popularity ratings.

    B. All the TV shows which have changed from black and white to color have improved their popularity ratings. Millions of American people watch TV regularly. Since we have adequately examined changes to color TV, we may conclude that changing to color improves popularity ratings.

18. A. Voters in our state must register as either Republicans, Democrats, or Independents. Our state system does not permit anyone to register as a minor party member. Since George, a registered voter, is not registered as a Republican or a Democrat, he must be registered as an Independent.

    B. Voters in our state must register as either Republicans, Democrats or Independents. Our state has held primary elections for thirty or more years. Since George, a registered voter, is not registered as a Republican or Democrat, he must be registered as an Independent.

19. A. Carmen is a better chess player than Dorcas, and Dorcas is a better chess player than Virgil. Inasmuch as these three students took first, second, and third places respectively in a recent chess tournament, we are justified in saying that Carmen is a better chess player than Virgil.

    B. Carmen is a better chess player than Dorcas, and Dorcas is a better chess player than Virgil. Inasmuch as Carmen reads books on chess but the others do not, we are justified in saying that Carmen is a better chess player than Virgil.

20. A. The musical combo I heard on the radio consisted of piano, bass, drums, trumpet and a singer. I know for a fact that Harry, one of the members of this combo, plays neither percussion nor stringed instruments. Therefore, it is safe to say that Harry plays the trumpet in this combo because that was not his singing voice on the solos.

    B. The musical combo that I heard on the radio consisted of piano, bass, drums, trumpet and a singer. I know for a fact that Harry, one of the members of this combo, plays neither percussion nor stringed instruments. Therefore, it is safe to say that Harry plays the trumpet in this combo because it is the trumpet that gives the combo its unique sound.

21. A. Proud Banner was the first place horse in the third race at Hialeah, so he apparently crossed the finish line first. First place in a horse race is the result of crossing the finish line first. Proud Banner was a 10-1 longshot and paid $20,000 to the owners.

    B. Proud Banner was the first place horse in the third race at Hialeah, so he apparently crossed the finish line first. First place in a horse race is the result of crossing the finish line first. No jockeys were disqualified for unethical conduct in the third race.

22. A. George marked an "X" in the box at the top of his ballot for a straight Democratic ticket. George has voted in every election held since 1950. Therefore, each Democratic candidate received a vote from George since marking a straight ticket means each candidate for that party receives a vote.

    B. George marked an "X" in the box at the top of his ballot for a straight Democratic ticket. George also put his ballot in the ballot box. Therefore, each Democratic candidate received a vote from George since marking a straight ticket means each candidate for that party receives a vote.

23. A. Andy Purth is sixteen years old, and I would imagine he is a high school student. He has lived on our block for nine years and has always been a very bright guy. High school students are between the ages of 14 and 19 in most cases.

    B. Andy Purth is sixteen years old, and I would imagine he is a high school student. He was promoted from the ninth grade and is not a school dropout. High school students are between the ages of 14 and 19 in most cases.

24. A. The large oak tree in our backyard has brown leaves on it. It was green this spring and it is now only the middle of June. Since dying trees and plants generally have brown leaves, our large oak tree must be dying.

    B. The large oak tree in our backyard has brown leaves on it. It was green this spring and has given us much shade from the bright sun. Since dying trees and plants generally have brown leaves, out large oak tree must be dying.

25. A. When a seedling grows, it becomes a sapling. If the sapling continues to grow, it eventually becomes a tree. In general, the growth process for trees includes thickening of the trunk and adding of branches and leaves. Thus in all cases, the tree is larger than its seedling.

    B. When a seedling grows, it becomes a sapling. If the sapling continues to grow, it eventually becomes a tree. Nurseries usually stock trees in both seedling and sapling sizes depending upon the time of year. Thus in all cases, the tree is larger than its seedling.

26. A. David plays first chair trumpet in the senior high school band, so he is probably a pretty good musician. He is also a good football player so he doesn't march with the band at the half during football games. Our band director says that playing first chair is a pretty good sign of a boy or girl being a good musician.

B. David plays first chair trumpet in the senior high school band, so he is probably a pretty good musician. He was also awarded an A in the state spring music festival. Our band director says that playing first chair is a pretty good sign of a boy or girl being a good musician.

27. A. Both football teams are back on the field. There is no special half time ceremony requiring the early return of the team. Since the return of the team signals that the second half kickoff is about to occur, the second half must be about ready to start.

B. Both football teams are back on the field. The home team will receive the kickoff to open the second half. Since the return of the team signals that the second half kickoff is about to occur, the second half must be about ready to start.

28. A. At the picnic people were playing games of baseball, volleyball, football, and horseshoes or were watching the others. Since John is very fond of picnics and he is not playing horseshoes, football, or volleyball, he must be playing baseball.

B. At the picnic people were playing games of baseball, volleyball, football, and horseshoes or were watching the others. Since John is not just standing around, and he is not playing horseshoes, football, or volleyball, he must be playing baseball.

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EVALUATION OF REASONING

Test RIII.
Selecting Reservations in Arguments

INSTRUCTIONS

In any argument there are at least three essential parts: (1) a claim, that is, a statement which the argument offers as a conclusion; (2) data, that is, a statement presenting information in support of the conclusion; and (3) a warrant, that is, a statement which tells how you get from the data (information) to the claim (conclusion).

data — It's almost dawn here.

warrant — When it is almost dawn in a place, the sun is about to shine in that place.

claim — The sun is about to shine here.

As you evaluate the above argument, you probably think immediately: "unless it's a cloudy morning." When you do so, you are identifying a possible reason why the argument may not be true. Such "reasons to doubt arguments" are called reservations.

In the following pages you will be asked to evaluate 28 arguments and to decide which one of four possible choices seems the most relevant reservation to raise. More than one choice may seem relevant, but you are to choose the statement which is the best reservation to the argument. Your answer should be recorded by blocking in with pencil the letter standing for the reservation which you think most important or relevant, i.e. (A), (B), (C), or (D).

1. The Melville Players do a very good job of putting on dramatic performances. Since Bobby Stamport is a member of the Melville players, he must be a pretty good performer.

   A. Unless the quality of these productions is due to the efforts of the entire cast working together and does not tell us much about the merits of a single performer.
   B. Unless the Melville Players put on only a few performances during the year.
   C. Unless the Melville Players do not draw large audiences to their productions.
   D. Unless Bobby Stamport has been with the Stratford Summer Players as well as the Melville Players.

2. Gary Fibber knows the rivers and lakes near his home. Knowing the rivers and lakes near one's home usually indicates a real love of fishing. Gary Fibber probably loves to fish.

   A. Unless a knowledge of the surrounding lakes and rivers may be acquired by means of other factors such as enjoyment of boating.
   B. Unless Gary Fibber may really enjoy spectator sports as much as fishing.
   C. Unless most successful fishermen often travel great distances to find good rivers and streams.
   D. Unless Gary Fibber enjoys fishing for food more than fishing for sport.

3. The people in River City have not been attending the Stars' baseball games. Since low attendance at baseball games causes a team to move to another city, the Stars are probably planning to move to another city.

   A. Unless the Stars have been losing baseball games.
   B. Unless the Stars' failure to win was caused by poor coaching.
   C. Unless the Stars can only be moved at the consent of the majority of the owners, and no single person can make the decision to pull them out of River City.
   D. Unless the Stars are not a professional baseball team, do not play for money, and consequently do not make decisions in terms of the number of people who come to their games.

4. New members of the city assembly serve on the transportation committee or on the education committee. Mr. Blackburn, a new member, has publicly announced that he will not serve on the education committee, so he will probably become a member of the transportation committee.

   A. Unless Mr. Blackburn will not be able to attend all of the assembly's meetings.
   B. Unless Mr. Blackburn has been excused from committee service so that he may serve as administrative assistant.
   C. Unless Mr. Blackburn knows less about public transportation than the last chairman of the transportation committee.
   D. Unless many of Mr. Blackburn's statements have been critical of the education committee.

5. Mr. Hobson supports Bill Smith for Mayor, and Bill Smith supports Clarence Dodert for City Judge. Therefore, Mr. Hobson supports Clarence Dodert for City Judge.

   A. Unless Mr. Hobson is an extreme liberal and only supports those candidates from his party who express strong approval of liberal programs.
   B. Unless Clarence Dodert has failed to campaign actively in Mr. Hobson's neighborhood.
   C. Unless Mr. Hobson's support of Bill Smith does not imply that Mr. Hobson supports all the people that Bill Smith supports.
   D. Unless Mr. Hobson is politically inexperienced, whereas Bill Smith has held several offices in the community.

6. Enrollment in our high school has been steadily increasing. Since increases in enrollment force school boards to build new high schools, our school board will probably build another high school soon.

   A. Unless there is still plenty of room in the old high school.
   B. Unless all school boards face increasing enrollments.
   C. Unless our school system has fewer students than many other systems which built new high schools.
   D. Unless the relationship between enrollments expressed by the word "increased" does not imply future changes in enrollment.

7. Mary has been wearing Bill's letter sweater. Since wearing a boy's letter sweater usually indicates that a girl is going with a boy, Mary must be going with Bill.

   A. Unless Mary is mad at Bill and may break up with him.
   B. Unless Mary has only been seen in Bill's sweater a few times.
   C. Unless Bill is Mary's brother, and Mary can borrow Bill's sweater when he is not wearing it.
   D. Unless Bill has two letter sweaters.

8. Most of the boys elected class president at our high school have been good looking chaps. Since this survey of past class presidents is a careful and thorough survey, we can conclude that being good looking causes a boy candidate to be elected.

   A. Unless many students do not take a very active interest in student elections.
   B. Unless most of the defeated candidates have also been good looking chaps.
   C. Unless some of the victorious candidates have been girls.
   D. Unless some classes have more girls in them than other classes.

9. Pineapple plantation A grows a superior quality pineapple. Plantations A and B are in the same valley and have similar soil, weather, and growing conditions. Thus, pineapple plantation B also has high quality fruit.

   A. Unless the two plantations market their products with different canning companies.
   B. Unless the plantation B owner uses inferior cultivation and fertilization methods.
   C. Unless the two plantations are located at opposite ends of the valley.
   D. Unless the plantation B owner plants half his land in sugar cane.

10. Billy Hatfield is a Boy Scout. Since Boy Scouts are usually good woodsmen, Billy Hatfield is probably a good woodsman.

   A. Unless Billy is a beginner who just started last week and has not yet learned the ways of scouting.
   B. Unless Billy's father had taught Billy to be a good woodsman before Billy joined the Boy Scouts.
   C. Unless the Scouts also teach their members crafts and skills not related to the woods.
   D. Unless most of Billy's merit badges are for work in crafts.

11. The average age of Congressmen in 1952 and the average age of the present Congress is about the same. There were about the same number of women in Congress in 1952 as there are now. And Congress was about the same size in 1952 as it is now. Since these two sessions of Congress are very similar in all these respects, the present session of Congress and the 1952 session of Congress can be said to be essentially similar on matters related to political questions.

   A. Unless Congress is more concerned with domestic and foreign policies than with political matters.
   B. Unless the average age of Congressmen, the number of women in Congress, and the size of Congress has little to do with similarity of the two Congresses on matters related to politics.
   C. Unless a Congressman may be both a member of this session and a member of the 1952 session.
   D. Unless the average age of Congressmen, the number of women in Congress, and the size of Congress can be explained in both cases by similarities in the way people voted in 1952 and in the last election.

12. Students always listen carefully in Mr. Smith's classes. Since frequent examinations over class discussion cause students to pay attention in class, Mr. Smith must give frequent examinations over his class comments.

   A. Unless Mr. Smith may also give long examinations at the end of the course in addition to his regular short examinations over class discussions.
   B. Unless many students do not actively participate in Mr. Smith's class discussion.
   C. Unless Mr. Smith's classes may be very interesting to students.
   D. Unless Mr. Smith counts the examination over class discussion quite heavily when he makes out the final grade for a student.

13. To graduate from Lindool High a student must take more English classes than history classes. But he must also take more mathematics classes than history classes. Therefore, a graduate of Lindool High has probably taken more English classes than mathematics classes.

A. Unless the graduation requirements at Lindool High have been changed several times.
B. Unless this comparison does not indicate the relative size of the English and history classes at Lindool High.
C. Unless some graduates receive special permission from the school principal allowing them to substitute another course for one of the required history courses.
D. Unless the comparison does not tell us the relationship between the number of English and mathematics courses required at Lindool High.

14. Perry Miller is not a freshman student at Jackson College. College students can generally be classified as freshmen, sophomores, juniors, and seniors. Therefore, Perry Miller is a sophomore, junior or senior.

A. Unless there aren't any graduate students at Jackson College.
B. Unless the freshman class is larger than the sophomore, junior, and senior classes combined.
C. Unless he is an unclassified special student taking one course.
D. Unless there are only eight special students at Jackson College.

15. Bill Smith has an office in the new state office building. Since many of the men who have offices in the new state office building are politicians, Bill Smith is probably a politician.

A. Unless Bill Smith was not elected until after the new state office building was constructed.
B. Unless the new state office building houses both state and county officials.
C. Unless Bill Smith holds an appointed office which cannot be given to politicians.
D. Unless many elected politicians are not housed in the new state office building.

16. Mr. Jones is running for county sheriff and is extremely popular with the citizens of this county. Since popularity with the voters usually causes a candidate to win the election, Mr. Jones will probably win the election.

A. Unless the election ends in a tie vote.
B. Unless being popular only contributes to victory, and other factors are necessary to win at the polls.
C. Unless Mr. Jones also manages a successful business, goes to church, and belongs to the country club.
D. Unless Mr. Jones has never previously held an elected office.

17. The Senate subcommittee investigating the Benworth Housing Bill has held several weeks of serious hearings on the proposal. Since long and serious hearings indicate that a group will favorably recommend the measure considered, the subcommittee will probably give its blessing to the bill.

A. Unless a great many more pressure groups are interested in this bill than in the education measure being considered by the subcommittee on education.
B. Unless too few of the subcommittee's meeting have been sampled to determine how serious its consideration of the bill really has been.
C. Unless the subcommittee has been holding secret sessions to hear both those supporting and those opposed to the bill.
D. Unless the length and seriousness of the hearings could also indicate that the subcommittee is troubled by the bill.

18. When I talked to Senator Samuels and to Senator Bywater, they both said that they did not have the power to reject a treaty proposed by the President. Since they are typical senators, I would guess that the Senate does not have the power to reject treaties proposed by the President.

A. Unless they attend most of the sessions of the Senate and take a very active interest in their jobs.
B. Unless the President does not have enough power to force a treaty through the Senate and must be supported by public opinion.
C. Unless some senators are often called to the White House to discuss legislation with the President.
D. Unless the senators as a group do have the power to reject treaties although as single individuals they do not have this power.

19. West High brings in college officials to talk to students and has three counselors for pre-college advising. But East High has only one counselor and brings in no college officials. Since these points of comparison are relevant to college preparation, West High has a stronger college preparatory program than does East High.

A. Unless few of the East High students have the grades or finances to go on to college.
B. Unless East High may have both college preparatory and technical training programs.
C. Unless the term "more personnel" does not express the difference between the East and West High programs.
D. Unless important aspects of both pre-college programs were overlooked.

20. My child is irritable and unmanageable today. When he is irritable and unmanageable, it is a sign that he will come down with a cold or other illness on the next day. Therefore, he will come down with a cold or other illness tomorrow.

A. Unless he is acting up because of a recent annoying incident.
B. Unless he doesn't really become ill but only appears so.
C. Unless this child is as healthy as his brother who seldom becomes ill.
D. Unless irritability in one child does not enable comparison with irritability in another child.

21. Fats Larson is a bigger man than Girth Swenson. Girth Swenson is more prominent than Big Daddy Johnson. Therefore, Fats Larson is more prominent than Big Daddy Johnson.

A. Unless not enough fat men were weighed to generalize obesity.
B. Unless being bigger than and being more prominent than do not mean the same thing.
C. Unless Fats Larson is of normal size.
D. Unless Fats Larson and Big Daddy Johnson are the same height.

22. Cuddles Kadooling is a friend of Roma Feldkrantz. Roma Feldkrantz is a friend of Ruby Finkel. Therefore, Ruby Finkel and Cuddles Kadoolink are friends.

A. Unless some friendships last longer than other friendships.
B. Unless association does not cause friendship.
C. Unless too few friends were examined to generalize compatibility.
D. Unless being a friend of a person does not make one a friend of that person's friends.

23. Jonathan Smedley's automobile is a foreign automobile. Foreign automobiles are usually small. Therefore, Old Smed's automobile must be small.

A. Unless Old Smed's car is a Rolls Royce which is a very large type of foreign car.
B. Unless some foreign cars are assembled in the United States.
C. Unless foreign cars and domestic cars are more unlike than alike.
D. Unless Old Smed's car has more chrome than most foreign cars.

24. Jones' lumber yard is doing more business this year than ever before. Jones' lumber yard and Smith's lumber yard are essentially alike with respect to sales practices. Therefore, Smith's lumber yard is doing more business this year than ever before.

A. Unless all lumber yards are doing well.
B. Unless a lumber yard can be doing well in one kind of business and poorly in another kind.
C. Unless doing more business is not a sign of greater profits.
D. Unless Jones' lumber yard received a lumber contract for a large new housing development.

25. The pink necklace Dianne wore in her wedding today was not one of her old ones. Bridal accessories are traditionally something old, something new, something borrowed, and something blue. Thus, Dianne's necklace must be new or borrowed.

A. Unless Dianne does not favor this tradition or has forgotten about it.
B. Unless Dianne is wearing a blue garter.
C. Unless wearing the necklace in her wedding does not imply that it is newer than some of her others.
D. Unless Dianne generally doesn't like to borrow jewelry.

26. The Parrish Academy indoor stadium has been used a lot for football practice. The athletic facilities of the Parrish Academy and Hampton Preparatory School are a good deal alike. So the Hampton Preparatory School indoor stadium has probably been used a lot for football practice.

A. Unless it has rained a lot causing indoor practice at Parrish, while it has been sunny at Hampton.
B. Unless the Hampton football coach believes in many practice sessions.
C. Unless these two schools do not play each other in football.
D. Unless Parrish Academy does not have a well developed program of intramural sports.

27. Tommy does not have his stamp collection any more. Collections are either in one's possession or have been sold, lost, destroyed, or given away. So Tommy probably either sold it, gave it away, or destroyed it.

A. Unless Tommy is somewhat careless with his collections and does not keep them in good condition.
B. Unless the relationship expressed by "missing" does not tell us the value of the collection.
C. Unless he also might have lost the stamp collection.
D. Unless his stamp collection was more valuable than his coin collection.

28. The University of California, Berkeley is experiencing a good deal of student unrest. The University of Wisconsin and the University at Berkeley are similar in matters of students, i.e., similar numbers, student organizations, backgrounds, and campus atmospheres. So the University of Wisconsin will probably experience student unrest.

A. Unless the University at Berkeley is only one of a number of major universities in the state.
B. Unless the administration at the University of Wisconsin has given the students a greater voice in campus operations.
C. Unless the two universities differ in the amount of federal funds granted to them.
D. Unless many students on both campuses are politically inactive.

EVALUATION OF REASONING
Test RIV.
Selecting Claims in Arguments

INSTRUCTIONS

The purpose of this exercise is to find out about your ability to draw conclusions in arguments. In any argument there are at least three parts: (1) a claim, that is, a statement which the argument offers as a conclusion; (2) data, that is, a statement presenting information in support of the conclusion; and (3) a warrant, that is, a statement which tells how you get from the data (information) to the claim (conclusion). In some arguments statements are also added which give reasons why the claim of the argument might not be acceptable. Such statements are called (4) reservations.

data — Our seats for the play are in the back row, and

warrant — it is usually hard to see from the back row.

reservation — The theater is very small and we may take along field glasses.

claim — Therefore, ...

Different types of claims or conclusions may be drawn from different types and combinations of data, warrants, and added information (which may or may not be a reservation). In the following pages you will be given 28 arguments such as the one given above and asked to decide what claim you can make from the information given. The claim which you choose should follow from the data, warrant, and any other statements included in the argument. If the data and warrant seem to lead to one of the claims presented, but the added information gives a reservation to that claim, then you should block in the letter for the answer, "You really can't tell whether _____." This means it is difficult to conclude with any degree of assurance that _____. On the other hand, if the added information in the argument is not a reservation, then you should choose between the two different claims. Thus, you are to respond to each argument by blocking in (with pencil) either (A), (B), or (C) on your answer sheet.

1. The Governor signed the new city construction bill. It provides funds which city governments may borrow at low interest for renewal projects. The Governor's signature on a bill means it is a law. Thus:

   A. You really can't tell whether the new city construction bill is law.
   B. The new city construction bill is probably law.
   C. The city renewal projects probably are just beginning.

2. Fewer people watch the James Carthing Show than watch the Late Show, and fewer people watch Jim Buff and the News than watch the Late Show. Also, the James Carthing Show is viewed by fewer people than any other show on television. Therefore:

   A. More people watch Jim Buff and the News than watch the James Carthing Show.
   B. The Late Show is the most popular show on TV.
   C. You really can't tell whether more people watch Jim Buff and the News than watch the James Carthing Show.

3. Senator Smith is a friend of Senator Moreroar. Senator Moreroar likes Congressman Bullfinch. Not all the friends of one man like each other or even know each other. Therefore, we may claim:

   A. Senator Smith probably likes Congressman Bullfinch.
   B. Senator Smith and Congressman Bullfinch are probably good friends.
   C. You really can't tell whether Senator Smith likes Congressman Bullfinch.

4. The cloth-bound book Garrity Jones is being printed in paperback. It is a story about life in a small New England town and cloth-bound books are printed in paperback if they sold well in cloth-bound editions. Thus:

   A. Garrity Jones probably is quite popular in New England.
   B. You really can't tell whether Garrity Jones sold successfully in cloth-bound form.
   C. Garrity Jones probably sold successfully in cloth-bound form.

5. Beaver High School is larger than Fox High School and Fox High School is larger than Vixen High School. All three high schools are within twelve miles of each other so we would agree that:

   A. You really can't tell whether Beaver High School is larger than Vixen High School.
   B. Beaver High School is larger than Vixen High School.
   C. Beaver High School is closer to Fox than is Vixen High.

6. Johnny always turns his work in on time. Turning work in on time plays an important part in passing college courses. Sometimes Johnny spends little time on his work and does not care much about studying. Therefore:

   A. Johnny probably will pass his college courses.
   B. You really can't tell whether Johnny will pass his college courses.
   C. Johnny probably does careful work in his courses.

7. The votes are almost all in for Polk County, and the county is going strongly Democratic in this election. Polk County and Lincoln County are alike in essential respects in this year's political campaign. Both are primarily agricultural, both are economically depressed, and both have a tradition of going Democratic. One may conclude that:

   A. You really can't tell whether Lincoln County will go Democratic in this election.
   B. Lincoln County will probably go Democratic in this election.
   C. Lincoln County will probably have a high percentage of farmers voting in this election.

8. The Tong Air Force Base is closed and we know the Air Force would not close a base which is essential to our national defense. We also know the base is not just closed temporarily for repairs and expansion. So:

   A. The Tong Air Force Base is probably not a very large base.
   B. You really can't tell whether the Tong Air Force Base is not a very large base.
   C. The Tong Air Force Base is probably not essential for defense of our nation.

GPO 811-246-4

9. George Finley won a four-year scholarship for college. Receiving a four-year college scholarship is usually the result of an outstanding high school academic record, and George is not a good enough athlete to win an athletic scholarship. Therefore:

   A. George Finley probably has an outstanding high school academic record.
   B. You really can't tell whether George Finley has a good high school academic record.
   C. George Finley probably is an outstanding college student.

10. It's a rainy election day. It's been pouring for three days and the weather man says we can expect rain clear through tomorrow afternoon. In the past, rainy days were accompanied by a heavy farm vote. Thus:

   A. You really can't tell whether a heavy farm vote will occur.
   B. It is probable that a heavy farm vote will occur.
   C. It is probable that very few farmers will vote on a clear day.

11. The majority of the elementary school teachers in Southside Elementary School are women. The Southside Elementary School teachers are typical of the elementary teachers in the city, and almost half of the city's elementary teachers teach at Southside Elementary School. It is safe to say that:

   A. The majority of women teachers in the city are probably at the elementary level.
   B. You really can't tell whether the majority of the elementary school teachers in the city are women.
   C. The majority of the elementary school teachers in the city are probably women.

12. The Magic Sounds, a pop recording group, have sold a million copies of their last five records, and previous record triumphs are a good sign that a new recording will also be a hit. A recent poll indicates that the Magic Sounds are currently ranked number one by teenagers. Therefore:

   A. It is probable that the Magic Sounds' new recording, "The Purple Blimp," will be a hit.
   B. It is probable that "The Purple Blimp" will be a typical pop recording.
   C. You really can't tell whether the Magic Sounds' new recording, "The Purple Blimp," will be a typical pop recording.

13. The Buckets is the tallest basketball team in the league, but it is by far the slowest team I have ever seen. Being the tallest team in the league often indicates that the team will win more games than anyone else. Therefore, one may assume that:

   A. You really can't tell whether The Buckets will win the most games of anyone in the league.
   B. The Buckets will probably increase their speed and scoring during the season.
   C. The Buckets will probably win the most games of anyone in the league.

14. Mike Nichols has enrolled in American History. Mike was required to take American History or European History. In addition, he may have elected European History as well. So:

   A. He probably did not enroll in European History.
   B. You really can't tell whether he enrolled in European History.
   C. He probably takes courses in several areas.

15. Camping opportunities in Wisconsin are varied and numerous. Wisconsin and Michigan are quite similar in regard to recreation. In addition, Michigan companies manufacture a lot of camping trailers. Thus, it would seem that:

   A. Camping opportunities in Michigan are better than in Wisconsin.
   B. Camping opportunities in Michigan are varied and numerous.
   C. You can't really tell whether camping opportunities in Michigan are better than in Wisconsin.

16. Our State University has been recruiting football players and giving rather large athletic scholarships. Active recruiting and large athletic scholarships create winning football teams. Our coach is a good football strategist and has fine assistant coaches. One can conclude:

   A. You really can't tell whether our football games will be well attended.
   B. Probably our football games will be well attended.
   C. Probably our university will have a winning football team.

17. Reginald Kauffeld didn't get an A in physics. He tends to be better in English and social studies than in sciences. Students get either A's, B's, C's, D's or F's in physics. Therefore, we can assume:

A. Reggie probably got an A in English and social studies.
B. Reggie probably got either a B, C, D, or F in physics.
C. You really can't tell whether Reggie got an A in English and social studies.

18. We just had a terrible blizzard this morning with drifts up to eight feet. Large snowfalls or other extreme weather conditions often force scheduled activities to be postponed. We have had other heavy snowfalls this winter. Therefore:

A. This is the third time school activities have been cancelled.
B. Our school dance scheduled for tonight will probably be postponed.
C. You really can't tell whether this is the third time school activities have been cancelled.

19. I just noticed the sounds of many engines starting outside the high school building. The starting of many automobile engines outside a public building signifies the end of an activity in the building and we also know it is 10:30 p.m., which is about the time that most school activities end. So:

A. Some activity at the high school is probably over.
B. You can't really tell whether some activity at the high school is over.
C. Probably few people walked to the activities at the high school tonight.

20. Betty Carson turned in her English theme, and it was not typed. She does not do very neat work. Students in English either type their themes, write them out in longhand, or don't do them at all. Therefore:

A. Betty probably wrote her theme very hurriedly the night before.
B. You really can't tell whether Betty wrote her theme very hurriedly the night before.
C. Betty probably wrote her theme in longhand.

21. Canada is a supporter of American resolutions in the U. N., and America supports Great Britain's proposed measures. Two countries might support the proposals of a third and still not agree with measures suggested by each other. Thus:

A. You can't really tell whether Canada supports British resolutions.
B. Canada probably supports British resolutions.
C. Canadian and British resolutions are probably similar.

22. Ronnie Royce dislikes taking tests. Ronnie has been exempted from taking tests for several courses in which he has high grades, and counselors have found that poor students dislike taking tests. So we see:

A. Ronnie is probably a poor student.
B. You can't really tell whether Ronnie is a poor student.
C. Ronnie probably gets good counseling.

23. The medal Frank won for the 220 yard race in the Little Olympics was not for third place. Medals are given for first, second, or third place finishes, and no other medals are given in any of the events. We can assume that:

A. Frank probably won a second or first place medal.
B. Frank probably ran very fast in the Little Olympics.
C. You really can't tell whether Frank ran very fast in the Little Olympics.

24. I recently interviewed eighty naval officers and found that they either were college graduates or were advanced from noncommissioned officer ranks. In becoming an officer, one cannot have both a college degree and have noncommissioned officer service. These were typical of all naval officers now on duty. Therefore:

A. Naval officers are either college graduates or have had noncommissioned officer service.
B. You can't really tell whether fewer naval officers have college degrees than have noncommissioned officer experience.
C. There are fewer naval officers with college degrees than with noncommissioned officer experience.

25. Jack says that Florida produces excellent citrus fruit, and Jill says that California and Florida are essentially similar in matters relating to citrus fruit-growing potential. There are radical differences in fruit-growing methods from area to area. Jack and Jill may infer that:

A. Florida oranges probably taste better than California oranges.
B. California probably produces excellent citrus fruit.
C. You can't really tell whether California produces excellent citrus fruit.

26. George and Tom were weighed in at 200 and 185 pounds respectively. Both George and Tom are members of the college wrestling team. The same scale gave an accurate measurement of both their weights. Then, we can say that:

A. You can't really tell whether George is a better wrestler than Tom.
B. George is heavier than Tom.
C. George is a better wrestler than Tom.

27. Jack's dog grew a heavy coat of fur last winter due to the cold weather. Did you know that Jill has a dog which is just like Jack's dog. It's true. Sometimes Jill's family takes her dog to Florida or provides the dog with a heavy garment which affects its need for a lot of fur. Thus:

A. The dogs will probably weigh the same within a couple of pounds.
B. A heavy winter coat of fur will probably be grown by Jill's dog.
C. You can't really tell whether Jill's dog will grow a heavy winter coat of fur.

28. Comparison of Africa and South America points up that the two continents are much alike in respect to temperature, soil types, and forms of animal life. The characteristics studied are sufficient to indicate similarity in matters related to agriculture. Africa has more desert area and less rainfall than South America. Therefore:

A. The two continents produce similar agricultural products.
B. You really can't tell whether the two continents produce similar agricultural products.
C. The African desert is really very much like the South American desert.

APPENDIX A
TEST KEYS

TI: Appraising Testimony in Terms of Internal Criteria

1. A (Accept)	21. B (Reject)	41. B (Reject)
2. B (Reject)	22. A (Accept)	42. A (Accept)
3. A (Accept)	23. B (Reject)	43. A (Accept)
4. B (Reject)	24. B (Reject)	44. A (Accept)
5. B (Reject)	25. B (Reject)	45. B (Reject)
6. A (Accept)	26. B (Reject)	46. B (Reject)
7. B (Reject)	27. A (Accept)	47. B (Reject)
8. B (Reject)	28. A (Accept)	48. A (Accept)
9. B (Reject)	29. A (Accept)	49. B (Reject)
10. A (Accept)	30. B (Reject)	50. B (Reject)
11. B (Reject)	31. B (Reject)	51. B (Reject)
12. A (Accept)	32. B (Reject)	52. B (Reject)
13. B (Reject)	33. B (Reject)	53. A (Accept)
14. B (Reject)	34. A (Accept)	54. B (Reject)
15. A (Accept)	35. B (Reject)	55. A (Accept)
16. B (Reject)	36. B (Reject)	56. B (Reject)
17. B (Reject)	37. B (Reject)	57. B (Reject)
18. A (Accept)	38. B (Reject)	58. B (Reject)
19. B (Reject)	39. A (Accept)	59. B (Reject)
20. B (Reject)	40. B (Reject)	60. A (Accept)

TII: Appraising Testimony in Terms of External Criteria; Consistency with Other Testimony

1. B (less likely)	11. B (less likely)
2. A (more likely)	12. B (less likely)
3. B (less likely)	13. A (more likely)
4. B (less likely)	14. B (less likely)
5. B (less likely)	15. B (less likely)
6. A (more likely)	16. A (more likely)
7. A (more likely)	17. A (more likely)
8. A (more likely)	18. A (more likely)
9. A (more likely)	19. B (less likely)
10. B (less likely)	20. A (more likely)

TIII: Appraising Testimony in Terms of External Criteria; Recency and Proximity

1. B	11. A	21. A	31. A
2. B	12. A	22. B	32. B
3. A	13. B	23. B	33. A
4. B	14. A	24. A	34. B
5. A	15. A	25. B	35. B
6. B	16. B	26. A	36. A
7. B	17. B	27. B	37. A
8. A	18. A	28. B	38. A
9. B	19. B	29. A	39. B
10. B	20. A	30. A	40. A

RI: Recognizing and Selecting Warrants in Arguments

1. D	8. E	15. E	22. E
2. E	9. C	16. B	23. D
3. E	10. B	17. D	24. B
4. E	11. E	18. B	25. C
5. C	12. B	19. A	26. D
6. B	13. E	20. A	27. E
7. A	14. C	21. E	28. D

RII: Recognizing Statements Which Answer Reservations in Arguments

1. A	8. B	15. B	22. B
2. A	9. A	16. B	23. B
3. A	10. B	17. A	24. A
4. B	11. A	18. A	25. A
5. B	12. B	19. A	26. B
6. A	13. A	20. A	27. A
7. B	14. A	21. B	28. B

RIII: Selecting Reservations in Arguments

1. A	8. B	15. C	22. D
2. A	9. B	16. B	23. A
3. D	10. A	17. D	24. D
4. B	11. B	18. D	25. A
5. C	12. C	19. D	26. A
6. A	13. D	20. A	27. C
7. C	14. C	21. B	28. B

RIV: Selecting Claims in Arguments

1. B	8. C	15. B	22. B
2. A	9. A	16. C	23. A
3. C	10. B	17. B	24. A
4. C	11. C	18. B	25. C
5. B	12. A	19. A	26. B
6. B	13. A	20. C	27. C
7. B	14. B	21. A	28. B

APPENDIX B
TESTING TIME ESTIMATES

The time taken by a student to complete a given test may vary as much as plus or minus five minutes from the estimated time because of variations in grade level, reading ability, and/or intelligence. It is not desirable to administer these tests with a time limit; the individual student should be allowed to complete the test using as much time as he needs. Previous administrations have indicated that most students will be able to finish the tests (including reading the instructions and marking answers on a separate answer sheet) within the times given below:

Test	Estimated Time Required
Testimony Part I	20 minutes
Testimony Part II	20 minutes
Testimony Part III	30 minutes
Reasoning Part I	35 minutes
Reasoning Part II	25 minutes
Reasoning Part III	35 minutes
Reasoning Part IV	35 minutes

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